



InterV Kyphoplasty Catheter  
Premarket Notification [510(k)] Submission

## Premarket Notification [510(k)] Summary

### SUBMITTER INFORMATION

Manufacturer's Name: Pan Medical Ltd  
Manufacturer's Address: Barnett Way, Barnwood, Gloucester, GL4 3RT UK  
Telephone (DDI): +44 1452 621621  
Fax: +44 1452 372140  
Establishment Registration: 3005146147  
Contact Person: Jennie Budding (Director of R&D/Production)  
Date Prepared: 16-April-2014

### DEVICE INFORMATION

Trade Name: InterV Kyphoplasty Catheter  
Common Name: Inflatable Bone Tamp  
Device Class: II  
Classification Name: Polymethylmethacrylate (PMMA) Bone Cement  
Arthroscope  
Classification Panel: Orthopedic Devices  
Classification Regulation: 21 CFR 888.3027  
21 CFR 888.1100  
Product Code(s): NDN  
HRX  
Predicate Device: Kyphon Inflatable Bone Tamp, K981251  
Kyphx® Xpander Inflatable Bone Tamps, K041454  
Reason for 510(k) submission: New Device

Pan Medical Ltd.

InterV Kyphoplasty Catheter  
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InterV Kyphoplasty Catheter is designed for use in balloon kyphoplasty; it comes as a single-use double lumen catheter with a low profile balloon mounted on the distal tip. The balloon is designed to compress cancellous bone and/or move cortical bone as it inflates. The balloon is designed to withstand bone resistance leading to an internal pressure of up to 400 psi (27 ATM). The key components are the balloon, shaft, Y-connector and two radiopaque marker bands positioned on the inner tubing/lumen at the proximal and distal ends of the inflatable component

**Intended use:**

InterV Kyphoplasty Catheter is intended to be used for reduction and fixation of fractures and/or creation of a void in cancellous bone in the spine during balloon kyphoplasty (for use with cleared spinal polymethylmethacrylate (PMMA) bone cements).

**SUMMARY OF TECHNOLOGICAL CHARACTERISTICS OF THE DEVICE COMPARED TO THE PREDICATE DEVICES**

Characteristic	New device	Predicate Device
Trade name	InterV Kyphoplasty catheter	Kyphon Inflatable Bone Tamp, K981251 Kyphx® Xpander Inflatable Bone Tamps, K041454
Compatible Cannula Size	8 G / 4.2 mm	8 G / 4.2 mm
Balloon Inflation Medium	60% Contrast	60% Contrast
Balloon Material	Polyurethane	Polyurethane
Balloon Size (Deflated Length)	10, 15 and 20 mm	10, 15 and 20 mm
Guide wire (Stylet)	Stainless Steel	Stainless Steel
Balloon Shape	Cylindrical	Cylindrical
Maximum Recommended Inflation Pressure	400 psi (27 ATM)	400 psi (27 ATM)
Maximum Recommended Inflation Volume (10 mm and 15 mm)	4 ml	4 ml
Maximum Recommended Inflation Volume (20 mm)	6 ml	6 ml

Pan Medical Ltd.

InterV Kyphoplasty Catheter  
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<b>Characteristic</b>	<b>Test Method</b>	<b>Results Summary</b>
Inflation pressure	Constrained Burst Test	The balloon catheter exceeded the requirements for the minimum burst pressure in a constrained environment
Inflation Volume	Unconstrained Burst Test	The balloon catheter exceeded the requirements for the minimum burst volume in a constrained environment
Inflated Balloon Dimensions	Balloon Inflation Test	The inflated balloon dimensions were substantially equivalent to those of the predicate devices
Balloon Double Wall Thickness	Calibrated Measurement	The double wall thickness of the balloons was substantially equivalent to those of the predicate devices

**SUMMARY OF CLINICAL TESTS**

N/A- No clinical tests were conducted for this submission

**CONCLUSION DRAWN FROM NON-CLINICAL DATA**

The results of the non-clinical tests show that the InterV Kyphoplasty Catheter meets or exceeds all performance requirements, and are substantially equivalent to the predicate devices.



DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

Food and Drug Administration  
10903 New Hampshire Avenue  
Document Control Center - WO66-G609  
Silver Spring, MD 20993-0002

April 16, 2014

Pan Medical Ltd.  
Ms. Jennie Budding  
Director of R&D/Production  
Barnett Way, Barnwood  
Gloucester  
GL4 3RT  
United Kingdom

Re: K132620

Trade/Device Name: InterV Kyphoplasty Catheter  
Regulation Number: 21 CFR 888.3027  
Regulation Name: Polymethylmethacrylate (PMMA) bone cement  
Regulatory Class: Class II  
Product Code: NDN, HRX  
Dated: February 28, 2014  
Received: March 4, 2014

Dear Ms. Budding:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration. Please note: CDRH does not evaluate information related to contract liability warranties. We remind you, however, that device labeling must be truthful and not misleading.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the Federal Register.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing

(21 CFR Part 807); labeling (21 CFR Part 801); medical device reporting (reporting of medical device-related adverse events) (21 CFR 803); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please contact the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 796-7100 or at its Internet address <http://www.fda.gov/MedicalDevices/ResourcesforYou/Industry/default.htm>. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR Part 807.97). For questions regarding the reporting of adverse events under the MDR regulation (21 CFR Part 803), please go to <http://www.fda.gov/MedicalDevices/Safety/ReportaProblem/default.htm> for the CDRH's Office of Surveillance and Biometrics/Division of Postmarket Surveillance.

You may obtain other general information on your responsibilities under the Act from the Division of Industry and Consumer Education at its toll-free number (800) 638-2041 or (301) 796-7100 or at its Internet address <http://www.fda.gov/MedicalDevices/ResourcesforYou/Industry/default.htm>.

Sincerely yours,

**Lori A. Wiggins**

for  
Mark N. Melkerson  
Director  
Division of Orthopedic Devices  
Office of Device Evaluation  
Center for Devices and  
Radiological Health

Enclosure

Pan Medical Ltd.

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## Indications for Use

510(k) Number (if known): K132620

Device Name: InterV Kyphoplasty Catheter

Indications for Use:

InterV Kyphoplasty Catheter is intended to be used for reduction and fixation of fractures and/or creation of a void in cancellous bone in the spine during balloon kyphoplasty (for use with cleared spinal polymethylmethacrylate (PMMA) bone cements).

Prescription Use   X    
(Part 21 CFR 801 Subpart D)

AND/OR

Over-The-Counter Use \_\_\_\_\_ (21 CFR 801 Subpart C)

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(PLEASE DO NOT WRITE BELOW THIS LINE-CONTINUE ON ANOTHER PAGE  
OF NEEDED)

Concurrence of CDRH, Office of Device Evaluation (ODE)

Laurence D. Coyne -S

(Division Sign-Off)

Division of Orthopedic Devices

510(k) Number: K132620